



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

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In re the application of)
CHONG, JR.)
Application No: 10/800,095)
Filed: March 12, 2004)
For: COMPONENT ARRAY BRACKET)
ASSEMBLY)

Examiner: Pape, Zachary
Art Unit: 2835
Docket No.: SUNMP238
Date: August 6, 2007

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 6, 2007.

Signed: _____

Kenneth D. Wright

**TRANSMITTAL OF REPLY BRIEF
(PATENT APPLICATION -- 37 CFR 1.193)**

Mail Stop: Appeal Brief-Patents
Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

This Reply Brief is in response to the Examiner's Answer mailed June 4, 2007. Please note that because August 4, 2007, falls on a Saturday, the two-month period for reply is extended to August 6, 2007.

Applicants believe that no fees are due in connection with the filing of this Reply Brief. However, the Commissioner is authorized to charge any required fees unknown to the Applicants to Deposit Account No. 50-0850, (Order No. SUNMP238). One additional copy of this transmittal is enclosed for potential fee processing.

Respectfully submitted,
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REPLY BRIEF

Mail Stop: Appeal Brief-Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

This Reply Brief is in response to the Examiner's Answer dated June 4, 2007. This Reply Brief is filed within the two-month time period extending to August 6, 2007. Please note that because August 4, 2007, falls on a Saturday, the two-month period for reply is extended to August 6, 2007. Please enter the following remarks.

The Listing of Claims on Appeal begins on page 2 of this Reply Brief.

Remarks/Arguments begin on page 6 of this Reply Brief.

LISTING OF CLAIMS ON APPEAL

1. A component positioning and securing bracket assembly, comprising:

a front rail, a rear rail, and a bottom rail to define a front, a rear, and a bottom boundary of the component positioning and securing bracket assembly, the front rail, the rear rail, and the bottom rail defining a structure into which is received the component;

a top plate for attaching to the component, the top plate including a keyed tail portion;

a tail receptacle for receiving the keyed tail portion, the tail receptacle configured to the rear rail;

a nose receptacle portion of the front rail for receiving a nose portion of the top plate;

a component connector to connect to a port of the component; and

a lever to provide leveraged motion, the leveraged motion causing the keyed tail portion to be received into the tail receptacle to positively hold and rigidly support the component in place and effecting a connection of the port of the component and the component connector and securing the component in the component positioning and securing bracket,

wherein the component positioning and securing bracket assembly is in an array of a plurality of components.

2. The component positioning and securing bracket assembly of claim 1,

wherein the array of a plurality of components is one array of a plurality of arrays in an array chassis.

3. The component positioning and securing bracket assembly of claim 1, wherein the component is a computer component.

4. The component positioning and securing bracket assembly of claim 3, wherein the computer component is a hard drive.

5. The component positioning and securing bracket assembly of claim 2, wherein the component is a computer component and the plurality of arrays in the array chassis is a plurality of arrays of computer components in the array chassis of a computer system rack.

6. The component positioning and securing bracket assembly of claim 2, wherein when the leveraged motion provides horizontal motion to secure the component in the component positioning and securing bracket assembly within the one array of a plurality of arrays in an array chassis.

7. The component positioning and securing bracket assembly of claim 1, wherein the component connector is attached to the front rail and wherein the bottom rail defines a lower boundary of the component positioning and securing bracket assembly such that when the component is received in the structure defined by the front rail, the rear rail, and the bottom rail, the port of the component is aligned with the component connector.

8. The component positioning and securing bracket assembly of claim 1, wherein the component connector provides power to the component.

9. The component positioning and securing bracket assembly of claim 1, wherein the component connector provides power and data to the component.

10. In an array of a plurality of disk drive components, a disk drive positioning and securing bracket assembly, comprising:

a device surrounding component for holding a disk drive;

a forward mounting post attached to an array chassis;

a rear mounting post attached to the array chassis; and

a lever to provide leveraged movement to the disk drive, the lever positioned on a side surface of the disk drive to be located within the array of the plurality of disk drive components,

wherein the device surrounding component includes a device positioning key and forward tabs, the device positioning key and forward tabs configured to be received in the rear mounting post and in the forward mounting post such that the device surrounding component having the disk drive therein is received in the rear mounting post and in the forward mounting post in a first direction of motion, and the lever provides leveraged movement in a second direction of motion positioning the device positioning key into the forward tabs to secure the disk drive.

11. The disk drive positioning and securing bracket assembly of claim 10, further comprising:

a power and data connector disposed within the forward mounting post; and

T-slots formed in the rear mounting post,

wherein when the lever provides leveraged movement in the second direction of motion to secure the disk drive, the device positioning key moves through the T-slots and a power and data port of the disk drive mates with the power and data connector.

12. The disk drive positioning and securing bracket assembly of claim 10, wherein the array of a plurality of disk drive components is disposed within an array chassis having a plurality of arrays of disk drive components.

13. The disk drive positioning and securing bracket assembly of claim 10, wherein the rear mounting post includes a keyway for receiving the device positioning key in the first direction of motion.

14. The disk drive positioning and securing bracket assembly of claim 11, wherein when the lever provides leveraged movement to secure the disk drive, the forward tabs are disposed within the forward mounting post and adjacent to the power and data connector.

15. The disk drive positioning and securing bracket assembly of claim 10, wherein the disk drive positioning and securing bracket assembly is constructed of materials including hard plastic and stainless steel alloy.

16. The disk drive positioning and securing bracket assembly of claim 10, wherein the first direction of motion is a vertical direction of motion and the second direction of motion is a horizontal direction of motion.

REMARKS/ARGUMENTS

This Reply Brief is in response to the Examiner's Answer dated June 4, 2007. This Reply Brief is filed within the two-month time period extending to August 6, 2007. Please note that because August 4, 2007, falls on a Saturday, the two-month period for reply is extended to August 6, 2007.

Response to Examiner's Answer

The Applicant's arguments presented in the Appeal Brief of February 1, 2007, remain fully applicable to the claim rejections on appeal. In the interest of brevity, the Applicant respectfully requests the Board of Patent Appeals and Interferences ("Board" hereafter) to refer to the Applicant's Appeal Brief of February 1, 2007, for a detailed explanation of the Applicant's position with respect to the Examiner's rejections. The remainder of the present Reply Brief responds specifically to the Examiner's comments as provided in the "Response to Argument" section of the Examiner's Answer dated June 4, 2007.

Rejection of Claim 10 under 35 U.S.C. 112, first paragraph

The Examiner continues to assert that the lever of claim 10 cannot be "positioned on a side surface of the disk drive," if the device surrounding component is surrounding said disk drive. More specifically, the Examiner continues to interpret the "device surrounding component" as enclosing the disk drive on all sides. However, as the Applicant's have previously explained in the Appeal Brief of February 1, 2007, the specification clearly does not describe the "device surrounding component" as enclosing the disk drive on ALL sides.

The Examiner has asserted that Figure 3A shows the disk drive 130 covered (on all sides) by the device surrounding component 151. However, with all due respect, the

Applicant respectfully submits that the Examiner has not understood what is depicted in Figure 3A. Specifically, Figure 3A identifies a side surface of the disk drive 130 with the reference numeral 130. Figure 3A shows the side surface of the disk drive 130 as not covered by the device surrounding component 151. The Board is requested to note that the side surface region of the disk drive 130 (as identified by the reference numeral 130) is depicted as an exposed rectangular region bounded by the top rail 151d, rear rail 151a, bottom rail 151e, and forward tabs 151f. Given that Figure 3A clearly shows the disk drive 130 as NOT covered on ALL sides by the device surrounding component, the Applicant does not understand the Examiner's continued insistence that it is appropriate to interpret the device surrounding component of claim 10 as enclosing the disk drive 130 on ALL sides.

Furthermore, the Applicant again notes the disclosure in paragraph [0058] of the specification that directly contrasts the "device surrounding component" with a "device surrounding cage." Paragraph [0058] specifically states that the "device surrounding cage" functions similar to the "device surrounding component" (151, Fig. 3A), except that the "device surrounding cage" would encase all sides of the hard drive 130, thereby further reinforcing the Applicant's submission that the "device surrounding component" is clearly defined in the specification to not cover ALL sides of the disk drive 130.

The Examiner has made the following incorrect assertion: "Nowhere does the specification provide positive support for the added limitation in claim 10 that the hard disk drive has both a lever and a device surrounding component as claimed." The Applicant submits that at least paragraph [0056] of the specification provides positive support for the limitations of claim 10 regarding the device surrounding component for holding the disk drive and the lever positioned on the side surface of the disk drive. For the convenience of the Board, paragraph [0056] states the following:

"In one embodiment of the invention, lever 200 is attached to hard drive 130 at pivot pin 202. In other embodiments, pivot pin 202 is attached to device surrounding component 151 (see Figure 3A), or to top plate 121 (see Figure 2A). As can be appreciated, because lever 200 pivots around pivot pin 202 to cause horizontal movement of hard drive 130, pivot pin 202 is attached to hard drive 130, or to a structure integral with hard drive 130."

The Applicant respectfully objects to the Examiner's statement that "the Appellants are attempting to add the limitation (new subject matter) through a combination of recitations and drawing embodiments in the specification in addition to merely citing that the specification does not preclude the added limitation from being present." In both the Appeal Brief of February 1, 2007, and the present Reply Brief, the Applicant has cited specific disclosures within the specification that clearly refute the Examiner's assertions regarding the rejection of claim 10 under 35 U.S.C. 112. The Applicant submits that no new matter has been added to the specification in arguing against the propriety of the Examiner's rejection of claim 10 under 35 U.S.C. 112.

In view of the foregoing, the Board is again requested to overturn the Examiner's rejection of claim 10 under 35 U.S.C. 112.

Rejection of Claim 1 under 35 U.S.C. 102

The Examiner has relied upon the support member 42 to teach the top plate of claim 1 for attaching to the component. Therefore, for claim 1 to be anticipated by Roesner, the support member 42 must include a keyed tail portion. The Examiner has relied upon the guide 70 to teach the keyed tail portion of the top plate of claim 1. However, the guide 70 is disclosed by Roesner as part of the support member 44, not the support member 42 (see paragraph [0018] and Figure 2B). Therefore, because Roesner

does not teach the guide 70 as part of the support member 42, it follows that Roesner does not teach a top plate having a keyed tail portion, as recited in claim 1.

The Examiner has asserted that because support members 40, 42, and 44 of Roesner may comprise an integrally formed structure, some of support members 40, 42, and 44 can be considered as parts of other support members. Specifically, the Examiner asserts that the guide 70 of support member 44 can be considered part of the support member 42. However, this is not taught by Roesner. Although Roesner teaches that support members 40, 42, and 44 can form an integral structure, Roesner does not blur the distinction between the support members 40, 42, and 44, as representing separate components having respective functional responsibilities.

For a claim to be anticipated under 35 U.S.C. 102, the elements in the prior art must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). In view of the foregoing, the Board is again requested to overturn the Examiner's rejection of claim 1 under 35 U.S.C. 102.

Rejection of Claim 10 under 35 U.S.C. 102

The Examiner asserts that the actuator 24 which is pivotally coupled to the front portion 50 of driver carrier 12, as taught by Roesner, is equivalent to the lever positioned on a side surface of the disk drive, as recited in claim 10. The Applicant requests that the Board consider the precise language of claim 10, which requires the lever to be positioned ON a side surface of the disk drive. The Examiner has chosen to interpret the term "on," as recited in claim 10, to mean in connection with an intervening component, i.e., the drive carrier 12 of Roesner, that is itself actually "on" the side surface of the disk drive. The Applicant submits that the Examiner's broad interpretation of the lever positioned "on" the side surface of the disk drive, as recited in claim 10, is not sufficient to establish anticipation of claim 10 under 35 U.S.C. 102.

It is well-established that the standard for lack of novelty (i.e., "anticipation") under 35 U.S.C. 102 is one of strict identity. For a claim to be anticipated under 35 U.S.C. 102, the elements in the prior art must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). In view of the foregoing, the Board is again requested to overturn the Examiner's rejection of claim 10 under 35 U.S.C. 102.

Rejection of Claim 11 under 35 U.S.C. 103

In applying the combination of Roesner and Aoki to reject claim 11, the Examiner has relied upon Roesner to teach the rear mounting post, and upon Aoki to teach the T-slots formed in the rear mounting post. Specifically, in the Examiner's Answer of June 4, 2007, (page 12, first paragraph) the Examiner states that Roesner teaches a rear mounting post (80). Also, in the Final Office Action of June 28, 2006, (page 7, last line), the Examiner states that "Roesner lacks specific teaching of a T-shaped slot." Additionally, in the Final Office Action of June 28, 2006, (page 7, last line), the Examiner states that "Aoki teaches a T-slot (rail 3, see Fig. 1)."

The Applicant submits that the guide rail 80 of Roesner does not lend itself to modification so as to have T-shaped slots formed therein, such that the guide 70 (asserted by the Office to teach the device positioning key of claim 11) will move through the T-shaped slots when the arm 58 (asserted by the Office to teach the lever of claim 11) provides movement of the drive 14 in the direction 28. Also, the configuration of the rail 3 of Aoki and the guide slot 5 defined therein do not share any common design characteristic or functional purpose with the guide rail 80 of Roesner. Furthermore, a modification of the guide rail 80 of Roesner to have T-shaped slots formed therein, in the manner shown in the rail 3 of Aoki, would not enable movement of the guide 70 of Roesner (asserted by the Office to teach the device positioning key of claim 11) through the T-slots of the modified guide rail 80. Consequently, the Applicant submits that there is no teaching, suggestion, or

motivation for one of skill in the art at the time of the invention to have modified the guide rail 80 of Roesner to have T-shaped slots formed therein, such as the T-shaped slot of the rail 3 of Aoki.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). As discussed above and in the Appeal Brief of February 1, 2007, the combination of Roesner and Aoki fails to teach all the limitations of claim 11.

Also, to establish *prima facie* obviousness of a claimed invention, there must be some teaching, suggestion, or motivation for one of ordinary skill in the art at the time of the invention to have combined the reference teachings in the manner suggested by the Examiner. As discussed above and in the Appeal Brief of February 1, 2007, there is no teaching, suggestion, or motivation for one of ordinary skill in the art at the time of the invention to have combined the teachings of Roesner and Aoki to arrive at the invention as recited in claim 11.

Furthermore, rejections based on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. Also, this analysis should be made explicit by the Examiner. See *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007). The Applicant submits that the Examiner's statement "it is well known in the art to use a T slot to provide better alignment of two connecting devices or components" is a mere conclusory statement. The Examiner has not provided an explicit analysis that includes articulated reasoning with some rational underpinning to support the assertion that it would have been obvious to combine the teachings of Roesner and Aoki in the manner suggested by the Examiner. Also, the Examiner has not provided an explicit analysis that includes articulated reasoning with some rational underpinning to support the

assertion that the guide rail 80 of Roesner can even be modified to have T-slots formed therein in the manner required by claim 11.

The Applicant submits that claim 11 is not rendered prima facie obvious under 35 U.S.C. 103 by the combination of Roesner and Aoki. In view of the foregoing, the Board is again requested to overturn the Examiner's rejection of claim 11 under 35 U.S.C. 103.

Dependent Claims 2-9, 12-16

Because a dependent claim incorporates each and every feature of its independent claim, the Applicant submits that each of dependent claims 2-9, 12-13, and 15-16 is patentable with respect to the cited art of record for at least the same reasons provided for its respective independent claim.

In view of the foregoing and the arguments presented in the Appeal Brief of February 1, 2007, the Board is respectfully requested to overturn the Examiner's rejections of claims 1-16. If the Examiner has any questions concerning the present Reply Brief, the Examiner is requested to contact the undersigned at (408) 774-6914. If any other fees are due in connection with filing this Reply Brief, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. SUNMP238). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
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